Name of the Work : Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

Bruhat Bengaluru Mahanagara Palike

Bytarayanapura Division

Job Code :-

Name of Agency :- M/s Karthik Enterprises

Bill No :-2nd Part Bill

Measurements recorded on 13/12/17

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
4	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)										
	Lottegollahalli Main Road										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	30.00			1.10	0.95	31.35	
	30.00	60.00		1.00	30.00			1.10	0.95	31.35	
	60.00	72.00		1.00	12.00			1.10	0.95	12.54	
	Main Road Culvert										
	0.00	8.20		1.00	8.20			1.60	1.40	18.37	
	Cross Road Culvert										
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	10.50	17.80		1.00	7.30			1.60	1.50	17.52	1st Cross Road
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	240.50	247.50		1.00	7.00			1.60	1.30	14.56	12th Cross Road
	262.20	268.00		1.00	5.80			1.60	1.20	11.14	
								Total Qty in Cum		**136.82**	

TEJUS CONSULTANTS

FOR KARTHIK ENTERPRISES

Authorised Signatory

13.12.17

Assistant Executive Engineer
Kodigehalli Sub Division
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 22/12/17

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
5	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)										
	Lottegollahalli Main Road										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	30.00			1.10	0.10	3.30	
	30.00	60.00		1.00	30.00			1.10	0.10	3.30	
	60.00	72.00		1.00	12.00			1.10	0.10	1.32	
	Main Road Culvert										
	0.00	8.20		1.00	8.20			1.60	0.15	1.97	
	Cross Road Culvert										
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	10.50	17.80		1.00	7.30			1.60	0.15	1.75	1st Cross Road
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	240.50	247.50		1.00	7.00			1.60	0.15	1.68	12th Cross Road
	262.20	268.00		1.00	5.80			1.60	0.15	1.39	L Shape Drain
							Total Qty in Cum			**14.71**	

For KARTHIK ENTERPRISES
Authorised Signatory

23/12

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 29/12/17

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
6	Providing laying plain/ reinforced cement concrete M20 Grade for Box Drain walls of thickness 10cm to 20cm including centering shuttering for work etc. complete as per approved drawing and design MORTH specification No. 1500, 1700, 2200. (P.No.265, I.No.37.59.2 of PW, P&IWTD SR 2016-17)										
	Lottegollahalli main Road Drain Raft Concrete										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	30.00			0.90	0.15	4.05	
	30.00	60.00		1.00	30.00			0.90	0.15	4.05	
	60.00	72.00		1.00	12.00			0.90	0.15	1.62	
	Main Road Culvert										
	0.00	8.20		1.00	8.20			1.40	0.25	2.87	
	Cross Road Culvert										
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	10.50	17.80		1.00	7.30			1.40	0.25	2.56	1st Cross Road
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	240.50	247.50		1.00	7.00			1.40	0.25	2.45	12th Cross Road
	262.20	268.00		1.00	5.80			1.40	0.25	2.03	
	Lottegollahalli main Road Drain Side Wall Concrete										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		2.00	30.00			0.15	0.60	5.40	
	30.00	60.00		2.00	30.00			0.15	0.65	5.85	
	60.00	72.00		2.00	12.00			0.15	0.65	2.34	
	Main Road Culvert										
	0.00	8.20		2.00	8.20			0.25	0.75	3.08	
	Cross Road Culvert										
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	10.50	17.80		2.00	7.30			0.25	0.80	2.92	1st Cross Road
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	240.50	247.50		2.00	7.00			0.25	0.70	2.45	12th Cross Road
	262.20	268.00		2.00	5.80			0.25	0.65	1.89	
							Total Qty in Cum			**43.55**	

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

JE 4.08

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P
Bangalore.

Measurements recorded on 29/12/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
10	KSRB - 4.9.2: Providing TMT steel Fe500 reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work									
							Unit weight of steel / meter			
	Lottegollahalli Main Road-10th Cross Road New Drain									
	RHS									
	10mm main U bars									
	inner main bars	1	720.00	2.00			0.617		888.48	
	8mm Dia bars									
	Distribution bars	1	9	72.00			0.39		252.72	
	Culvet									
	12 main U bars									
	inner main bars	1	283.00	2.80			0.889		704.44	
	outer main bars	1	283.00	3.20			0.889		805.08	
	Distribution bars									
	10mm Dia bars									
	inner main bars	1	20	28.30			0.617		349.22	
	outer main bars	1	22	28.30			0.617		384.14	
	chairs 12mm dia	1	28	0.6			0.889		15.10	
									3399.18	**Kgs**
							Total		**3.40**	**MT**

TEJUS CONSTRUCTIONS

23/12

For KARTHIK ENTERPRISES

Authorised Signatory

23/12

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 8/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
27	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWD SR 2016-17)										
	Lottegollahalli Main Road										
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	0.00	32.50		1.00	32.50	1.50	1.50	1.50		48.75	
	32.50	67.00		1.00	34.50	3.25	4.00	3.63		125.06	
	67.00	81.00		1.00	14.00	1.50	1.50	1.50		21.00	
	81.00	111.00		1.00	30.00	4.60	2.50	3.55		106.50	
	111.00	141.00		1.00	30.00	1.00	1.00	1.00		30.00	
	141.00	171.00		1.00	30.00	1.00	1.00	1.00		30.00	
	171.00	201.00		1.00	30.00	1.00	1.40	1.20		36.00	
	201.00	231.00		1.00	30.00	1.40	1.20	1.30		39.00	
	231.00	261.00		1.00	30.00	1.20	0.70	0.95		28.50	
	261.00	291.00		1.00	30.00	0.70	0.70	0.70		21.00	
	351.00	381.00		1.00	30.00	2.20	2.00	2.10		63.00	
	381.00	404.00		1.00	11.00	2.30	2.30	2.30		25.30	
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	0.00	32.50		1.00	17.50	0.60	0.60	0.60		10.50	
	32.50	67.00		1.00	34.50	0.60	0.70	0.65		22.43	
	67.00	81.00		1.00	14.00	0.90	0.70	0.80		11.20	
							Total Qty in Sqm			**618.24**	

TEWS CONSULTANTS

JE 8.08

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 12/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
28	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)										
	Lottegollahalli Main Road										
	From Devinagra Junction to towards Jalagaradamma temple										
	0.00	15.00		1.00	15.00	9.30	7.00	8.15		122.25	
	15.00	30.00		1.00	15.00	7.00	7.40	7.20		108.00	
	30.00	45.00		1.00	15.00	7.40	9.30	8.35		125.25	
	45.00	60.00		1.00	15.00	9.30	7.50	8.40		126.00	
	60.00	75.00		1.00	15.00	7.50	9.20	8.35		125.25	
	75.00	90.00		1.00	15.00	9.20	7.10	8.15		122.25	
	90.00	100.80		1.00	10.80	7.10	8.00	7.55		81.54	
	100.80	102.30		0.00	0.00	8.00	7.70	7.85		0.00	Culvert
	102.30	120.00		1.00	17.70	7.70	8.70	8.20		145.14	
	120.00	135.00		1.00	15.00	8.70	7.20	7.95		119.25	
	135.00	150.00		1.00	15.00	7.20	7.40	7.30		109.50	
	150.00	165.00		1.00	15.00	7.40	8.80	8.10		121.50	
	165.00	180.00		1.00	15.00	8.80	7.30	8.05		120.75	
	180.00	195.00		1.00	15.00	7.30	7.00	7.15		107.25	
	195.00	210.00		1.00	15.00	7.00	7.60	7.30		109.50	
	210.00	225.00		1.00	15.00	7.60	9.70	8.65		129.75	
	225.00	240.00		1.00	15.00	9.70	9.30	9.50		142.50	
	240.00	255.00		1.00	15.00	9.30	7.20	8.25		123.75	
	255.00	270.00		1.00	15.00	7.20	6.34	6.77		101.55	
	270.00	285.00		1.00	15.00	6.34	6.30	6.32		94.80	
	285.00	300.00		1.00	15.00	6.30	5.70	6.00		90.00	
	300.00	315.00		1.00	15.00	5.70	5.60	5.65		84.75	
	315.00	330.00		1.00	15.00	5.60	5.30	5.45		81.75	
	330.00	345.00		1.00	15.00	5.30	4.80	5.05		75.75	
	345.00	360.00		1.00	15.00	4.80	5.10	4.95		74.25	
	360.00	375.00		1.00	15.00	5.10	5.40	5.25		78.75	
	375.00	390.00		1.00	15.00	5.40	6.20	5.80		87.00	
	390.00	406.00		1.00	16.00	6.20	6.00	6.10		97.60	
	Deduction Prime Coat -Same As Above Quantity									-618.24	
									Total Qty in Sqm	**2287.39**	

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

12.Feb.18

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 12/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
29	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)										
	For Laying DBM										
	Lottegollahalli Main Road										
	From Devinagra Junction to towards Jalagaradamma temple										
	0.00	15.00		1.00	15.00	9.30	7.00	8.15		122.25	
	15.00	30.00		1.00	15.00	7.00	7.40	7.20		108.00	
	30.00	45.00		1.00	15.00	7.40	9.30	8.35		125.25	
	45.00	60.00		1.00	15.00	9.30	7.50	8.40		126.00	
	60.00	75.00		1.00	15.00	7.50	9.20	8.35		125.25	
	75.00	90.00		1.00	15.00	9.20	7.10	8.15		122.25	
	90.00	100.80		1.00	10.80	7.10	8.00	7.55		81.54	
	100.80	102.30		1.00	0.00	8.00	7.70	7.85		0.00	Culvert
	102.30	120.00		1.00	17.70	7.70	8.70	8.20		145.14	
	120.00	135.00		1.00	15.00	8.70	7.20	7.95		119.25	
	135.00	150.00		1.00	15.00	7.20	7.40	7.30		109.50	
	150.00	165.00		1.00	15.00	7.40	8.80	8.10		121.50	
	165.00	180.00		1.00	15.00	8.80	7.30	8.05		120.75	
	180.00	195.00		1.00	15.00	7.30	7.00	7.15		107.25	
	195.00	210.00		1.00	15.00	7.00	7.60	7.30		109.50	
	210.00	225.00		1.00	15.00	7.60	9.70	8.65		129.75	
	225.00	240.00		1.00	15.00	9.70	9.30	9.50		142.50	
	240.00	255.00		1.00	15.00	9.30	7.20	8.25		123.75	
	255.00	270.00		1.00	15.00	7.20	6.34	6.77		101.55	
	270.00	285.00		1.00	15.00	6.34	6.30	6.32		94.80	
	285.00	300.00		1.00	15.00	6.30	5.70	6.00		90.00	
	300.00	315.00		1.00	15.00	5.70	5.60	5.65		84.75	
	315.00	330.00		1.00	15.00	5.60	5.30	5.45		81.75	
	330.00	345.00		1.00	15.00	5.30	4.80	5.05		75.75	
	345.00	360.00		1.00	15.00	4.80	5.10	4.95		74.25	
	360.00	375.00		1.00	15.00	5.10	5.40	5.25		78.75	
	375.00	390.00		1.00	15.00	5.40	6.20	5.80		87.00	
	390.00	406.00		1.00	16.00	6.20	6.00	6.10		97.60	
	For Laying BC										
	0.00	15.00		1.00	15.00	9.30	7.00	8.15		122.25	
	15.00	30.00		1.00	15.00	7.00	7.40	7.20		108.00	
	30.00	45.00		1.00	15.00	7.40	9.30	8.35		125.25	
	45.00	60.00		1.00	15.00	9.30	7.50	8.40		126.00	
	60.00	75.00		1.00	15.00	7.50	9.20	8.35		125.25	
	75.00	90.00		1.00	15.00	9.20	7.10	8.15		122.25	
	90.00	100.80		1.00	10.80	7.10	8.00	7.55		81.54	
	100.80	102.30		1.00	0.00	8.00	7.70	7.85		0.00	Culvert
	102.30	120.00		1.00	17.70	7.70	8.70	8.20		145.14	
	120.00	135.00		1.00	15.00	8.70	7.20	7.95		119.25	

12/1/18

PLUS CONSULTANTS

Measurements recorded on 13/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
	135.00	150.00		1.00	15.00	7.20	7.40	7.30		109.50	
	150.00	165.00		1.00	15.00	7.40	8.80	8.10		121.50	
	165.00	180.00		1.00	15.00	8.80	7.30	8.05		120.75	
	180.00	195.00		1.00	15.00	7.30	7.00	7.15		107.25	
	195.00	210.00		1.00	15.00	7.00	7.60	7.30		109.50	
	210.00	225.00		1.00	15.00	7.60	9.70	8.65		129.75	
	225.00	240.00		1.00	15.00	9.70	9.30	9.50		142.50	
	240.00	255.00		1.00	15.00	9.30	7.20	8.25		123.75	
	255.00	270.00		1.00	15.00	7.20	6.34	6.77		101.55	
	270.00	285.00		1.00	15.00	6.34	6.30	6.32		94.80	
	285.00	300.00		1.00	15.00	6.30	5.70	6.00		90.00	
	300.00	315.00		1.00	15.00	5.70	5.60	5.65		84.75	
	315.00	330.00		1.00	15.00	5.60	5.30	5.45		81.75	
	330.00	345.00		1.00	15.00	5.30	4.80	5.05		75.75	
	345.00	360.00		1.00	15.00	4.80	5.10	4.95		74.25	
	360.00	375.00		1.00	15.00	5.10	5.40	5.25		78.75	
	375.00	390.00		1.00	15.00	5.40	6.20	5.80		87.00	
	390.00	406.00		1.00	16.00	6.20	6.00	6.10		97.60	
							Total Qty in Sqm			5811.26	

For KARTHIK ENTERPRISES

Authorised Signatory

13/1

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 12/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
30	KSRRB M500-16. Providing and laying dense bituminous macadam 50-75mm compacted thickness with 4.5% VG-30 Bitumen using 40/60 TPH capacity H.M.P, using crushed aggregates of grading II, premixed with VG 30 grade bituminous binder and transporting the hot mix to work site, laying with mechanical paver to the required grade level and alignment rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10, complete in all respects complete as per specification MORTH specification No. 507 (P.No.163 I.No. 21.17.6 of PW,P&IWTD S.R 2016-17)										
	Lottegollahalli Main Road										
	From Devinagra Junction to towards Jalagaradamma temple										
	0.00	15.00		1.00	15.00	9.30	7.00	8.15	0.05	6.11	
	15.00	30.00		1.00	15.00	7.00	7.40	7.20	0.05	5.40	
	30.00	45.00		1.00	15.00	7.40	9.30	8.35	0.05	6.26	
	45.00	60.00		1.00	15.00	9.30	7.50	8.40	0.05	6.30	
	60.00	75.00		1.00	15.00	7.50	9.20	8.35	0.05	6.26	
	75.00	90.00		1.00	15.00	9.20	7.10	8.15	0.05	6.11	
	90.00	100.80		1.00	10.80	7.10	8.00	7.55	0.05	4.08	
	100.80	102.30		1.00	1.50	8.00	7.70	7.85			Culvert
	102.30	120.00		1.00	17.70	7.70	8.70	8.20	0.05	7.26	
	120.00	135.00		1.00	15.00	8.70	7.20	7.95	0.05	5.96	
	135.00	150.00		1.00	15.00	7.20	7.40	7.30	0.05	5.48	
	150.00	165.00		1.00	15.00	7.40	8.80	8.10	0.05	6.08	
	165.00	180.00		1.00	15.00	8.80	7.30	8.05	0.05	6.04	
	180.00	195.00		1.00	15.00	7.30	7.00	7.15	0.05	5.36	
	195.00	210.00		1.00	15.00	7.00	7.60	7.30	0.05	5.48	
	210.00	225.00		1.00	15.00	7.60	9.70	8.65	0.05	6.49	
	225.00	240.00		1.00	15.00	9.70	9.30	9.50	0.05	7.13	
	240.00	255.00		1.00	15.00	9.30	7.20	8.25	0.05	6.19	
	255.00	270.00		1.00	15.00	7.20	6.34	6.77	0.05	5.08	
	270.00	285.00		1.00	15.00	6.34	6.30	6.32	0.05	4.74	
	285.00	300.00		1.00	15.00	6.30	5.70	6.00	0.05	4.50	
	300.00	315.00		1.00	15.00	5.70	5.60	5.65	0.05	4.24	
	315.00	330.00		1.00	15.00	5.60	5.30	5.45	0.05	4.09	
	330.00	345.00		1.00	15.00	5.30	4.80	5.05	0.05	3.79	
	345.00	360.00		1.00	15.00	4.80	5.10	4.95	0.05	3.71	
	360.00	375.00		1.00	15.00	5.10	5.40	5.25	0.05	3.94	
	375.00	390.00		1.00	15.00	5.40	6.20	5.80	0.05	4.35	
	390.00	406.00		1.00	16.00	6.20	6.00	6.10	0.05	4.88	
							Total Qty in Cum			145.28	

TEJUS CONSULTANTS

12.1.18

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 13/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
31	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)										
	Lottegollahalli Main Road										
	From Devinagra Junction to towards Jalagaradamma temple										
	0.00	15.00		1.00	15.00	9.30	7.00	8.15	0.04	4.89	
	15.00	30.00		1.00	15.00	7.00	7.40	7.20	0.04	4.32	
	30.00	45.00		1.00	15.00	7.40	9.30	8.35	0.04	5.01	
	45.00	60.00		1.00	15.00	9.30	7.50	8.40	0.04	5.04	
	60.00	75.00		1.00	15.00	7.50	9.20	8.35	0.04	5.01	
	75.00	90.00		1.00	15.00	9.20	7.10	8.15	0.04	4.89	
	90.00	100.80		1.00	10.80	7.10	8.00	7.55	0.04	3.26	
	100.80	102.30		1.00	1.50	8.00	7.70	7.85			Culvert
	102.30	120.00		1.00	17.70	7.70	8.70	8.20	0.04	5.81	
	120.00	135.00		1.00	15.00	8.70	7.20	7.95	0.04	4.77	
	135.00	150.00		1.00	15.00	7.20	7.40	7.30	0.04	4.38	
	150.00	165.00		1.00	15.00	7.40	8.80	8.10	0.04	4.86	
	165.00	180.00		1.00	15.00	8.80	7.30	8.05	0.04	4.83	
	180.00	195.00		1.00	15.00	7.30	7.00	7.15	0.04	4.29	
	195.00	210.00		1.00	15.00	7.00	7.60	7.30	0.04	4.38	
	210.00	225.00		1.00	15.00	7.60	9.70	8.65	0.04	5.19	
	225.00	240.00		1.00	15.00	9.70	9.30	9.50	0.04	5.70	
	240.00	255.00		1.00	15.00	9.30	7.20	8.25	0.04	4.95	
	255.00	270.00		1.00	15.00	7.20	6.34	6.77	0.04	4.06	
	270.00	285.00		1.00	15.00	6.34	6.30	6.32	0.04	3.79	
	285.00	300.00		1.00	15.00	6.30	5.70	6.00	0.04	3.60	
	300.00	315.00		1.00	15.00	5.70	5.60	5.65	0.04	3.39	
	315.00	330.00		1.00	15.00	5.60	5.30	5.45	0.04	3.27	
	330.00	345.00		1.00	15.00	5.30	4.80	5.05	0.04	3.03	
	345.00	360.00		1.00	15.00	4.80	5.10	4.95	0.04	2.97	
	360.00	375.00		1.00	15.00	5.10	5.40	5.25	0.04	3.15	
	375.00	390.00		1.00	15.00	5.40	6.20	5.80	0.04	3.48	
	390.00	406.00		1.00	16.00	6.20	6.00	6.10	0.04	3.90	
							Total Qty in Cum			**116.23**	

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
11	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17)										
	Lottegollahalli main Road Drain										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	30.00			0.90		27.00	
	30.00	60.00		1.00	30.00			0.90		27.00	
	60.00	72.00		1.00	12.00			0.90		10.80	
							Total Qty in Sqm			**64.80**	

TEJUS CONSULTANTS

4.08

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
12	KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications, (only chamfered length shall be recorded) KBS 5.1.13 (P.No.24, I.No.5.22 of PW,P&IWTD SR 2016-17)										
	Lottegollahalli main Road Drain										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	50.00			3.00		150.00	
	30.00	60.00		1.00	50.00			3.00		150.00	
	60.00	72.00		1.00	20.00			3.00		60.00	
							Total Qty in Rmt			**360.00**	

TEJUS CONSULTANTS

JE 31.08

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
13	Providing One line dressing to granite stone slab/ granite stone masonry as per speciication (P.No.23, I.No.5.17 of PW,P&IWTD SR 2016-17)										
	Lottegollahalli main Road Drain										
	Lottegollahalli Main Road-10th Cross Road										
	0.00	30.00		1.00	30.00			0.90		27.00	
	30.00	60.00		1.00	30.00			0.90		27.00	
	60.00	72.00		1.00	12.00			0.90		10.80	
							Total Qty in Sqm			**64.80**	

TEJUS CONSULTANTS

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
21	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)										
	Lottegollahalli main Road Drain Raft Concrete										
	Main Road Culvert										
	0.00	8.20		1.00	8.20			1.50		12.30	
	Cross Road Culvert										
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	10.50	17.80		1.00	7.30			1.50		10.95	1st Cross Road
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	240.50	247.50		1.00	7.00			1.50		10.50	12th Cross Road
								Total Qty in Sqm		**33.75**	

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
24	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No.179, I.No. 24.1 of PW,P&IWTD SR 2015-16)										
	Lottegollahalli main Road										
	LHS From Devinagra Junction to towards Jalagaradamma temple										
	0.00	10.50		1.00	10.50			0.35		3.68	
	17.80	49.30		1.00	31.50			0.35		11.03	
	55.60	75.00		1.00	19.40			0.35		6.79	
	79.40	103.00		1.00	23.60			0.35		8.26	
	RHS From Devinagra Junction to towards Jalagaradamma temple										
	33.80	61.80		1.00	28.00			0.35		9.80	
	66.40	97.00		1.00	30.60			0.35		10.71	
	102.60	116.00		1.00	13.40			0.35		4.69	
	209.40	240.50		1.00	31.10			0.35		10.89	
	247.50	262.20		1.00	14.70			0.35		5.15	
	268.00	307.00		1.00	39.00			0.35		13.65	
							Total Qty in Sqm			**84.63**	

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahaili main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
32	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW.P&IWTD SR 2016-17)										
	Lottegollahalli Main Road										
	From Devinagra Junction to towards Jalagaradamma temple										
	Edge Lane Marking										
	0.00	15.00		2.00	15.00			0.10		3.00	
	15.00	30.00		2.00	15.00			0.10		3.00	
	30.00	45.00		2.00	15.00			0.10		3.00	
	45.00	60.00		2.00	15.00			0.10		3.00	
	60.00	75.00		2.00	15.00			0.10		3.00	
	75.00	90.00		2.00	15.00			0.10		3.00	
	90.00	100.80		2.00	10.80			0.10		2.16	
	100.80	102.30		2.00	1.50			0.10			Culvert
	102.30	120.00		2.00	17.70			0.10		3.54	
	120.00	135.00		2.00	15.00			0.10		3.00	
	135.00	150.00		2.00	15.00			0.10		3.00	
	150.00	165.00		2.00	15.00			0.10		3.00	
	165.00	180.00		2.00	15.00			0.10		3.00	
	180.00	195.00		2.00	15.00			0.10		3.00	
	195.00	210.00		2.00	15.00			0.10		3.00	
	210.00	225.00		2.00	15.00			0.10		3.00	
	225.00	240.00		2.00	15.00			0.10		3.00	
	240.00	255.00		2.00	15.00			0.10		3.00	
	255.00	270.00		2.00	15.00			0.10		3.00	
	270.00	285.00		2.00	15.00			0.10		3.00	
	285.00	300.00		2.00	15.00			0.10		3.00	
	300.00	315.00		2.00	15.00			0.10		3.00	
	315.00	330.00		2.00	15.00			0.10		3.00	
	330.00	345.00		2.00	15.00			0.10		3.00	
	345.00	360.00		2.00	15.00			0.10		3.00	
	360.00	375.00		2.00	15.00			0.10		3.00	
	375.00	390.00		2.00	15.00			0.10		3.00	
	390.00	406.00		2.00	16.00			0.10		3.20	
	Centre Lane Marking										
	0.00	15.00		0.50	15.00			0.10		0.75	
	15.00	30.00		0.50	15.00			0.10		0.75	
	30.00	45.00		0.50	15.00			0.10		0.75	
	45.00	60.00		0.50	15.00			0.10		0.75	
	60.00	75.00		0.50	15.00			0.10		0.75	
	75.00	90.00		0.50	15.00			0.10		0.75	
	90.00	100.80		0.50	10.80			0.10		0.54	

TEJUS CONSULTANTS

Measurements recorded on

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
	100.80	102.30		0.50	1.50			0.10			Culvert
	102.30	120.00		0.50	17.70			0.10		0.89	
	120.00	135.00		0.50	15.00			0.10		0.75	
	135.00	150.00		0.50	15.00			0.10		0.75	
	150.00	165.00		0.50	15.00			0.10		0.75	
	165.00	180.00		0.50	15.00			0.10		0.75	
	180.00	195.00		0.50	15.00			0.10		0.75	
	195.00	210.00		0.50	15.00			0.10		0.75	
	210.00	225.00		0.50	15.00			0.10		0.75	
	225.00	240.00		0.50	15.00			0.10		0.75	
	240.00	255.00		0.50	15.00			0.10		0.75	
	255.00	270.00		0.50	15.00			0.10		0.75	
	270.00	285.00		0.50	15.00			0.10		0.75	
	285.00	300.00		0.50	15.00			0.10		0.75	
	300.00	315.00		0.50	15.00			0.10		0.75	
	315.00	330.00		0.50	15.00			0.10		0.75	
	330.00	345.00		0.50	15.00			0.10		0.75	
	345.00	360.00		0.50	15.00			0.10		0.75	
	360.00	375.00		0.50	15.00			0.10		0.75	
	375.00	390.00		0.50	15.00			0.10		0.75	
	390.00	406.00		0.50	16.00			0.10		0.80	
							Total Qty in Sqm			101.13	

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
36	Providing and fixing M S Grating										
	Lottegollahalli-LHS										
	0.00	406.00		17.00	0.25			0.25		1.06	5m Interval
	RHS										
	0.00	406.00		32.00	0.25			0.25		2.00	
							Total Qty in Sqm			3.06	

TEJUS CONSULTANTS

5.08

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

39

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
39	KSRRB M800-35. Supply and Installation of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000kg tested in accordance to specification of category A of MORTH Circular No RW/NH/33023/10-97-Do III Dt 11.06.1997. The Height, width and length shall no exceed 50mm, 100mm, and 102mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19mm and height not less than 30 mm) from the body is to be a minimum vakue of 500 kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineer with 2 years warranty for the reflectivity from the original manufacturer is mandatory along with necessary test certification from the certified laboratory. Third party test certificates from a reputed test laboratory shall be submitted with seal and signature in originals. (P.No.189, I.No.24.41 of PW,P&IWTD SR 2016-17)									
	Lottegollahalli Main Road									
				3.00	81.00					
									243.0	5m interval
							Total Qty in Nos		**243.00**	

M/s CONSULTANTS PVT. LTD.

N.08

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Ba[illegible]

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
40	Manufacturing, Supply & Fixing of Retro- Reflection Road name sign board single Arrow size 1.98X0.9m size made out if wide angle cube corner micro prismatic grade sheeting confirming to IRC 67:2010 & type XI standards of ASTM D 4956-09 specifications and fixed over 2mm thick aluminium sheet back support frame of stainless stell supported by 30NB 1.2mm thick stainless steel pipe all around and 65NB 1.5mm thick pipe vertical post (AISI 202 Grade) firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 30cmx30cmx45cm etc.complete. The information message shal be made out of cut out letters in blue colour transparent overlay film as per IRC 67-2010 Guidelines, 7 years pre-qualification warranty for retro reflective sheeting from the original sheeting manufacturer and a certied copy of three years outdoor exposure report from an independent test lab for the product offered shall be submitted by the contractor. The sign board shall be Retro-Reflective Type XL									
	Lottegollahalli Main Road									
				4.00					4.00	
							Total Qty in Nos		**4.00**	

TEJUS CONSULTANTS

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.
Bangalore.

Measurements recorded on 28/1/18

Name Of work : - Improvements to Road,Drain and Footpath in Lottegollahalli main road and cross roads in ward No.8 Kodigehalli

BOQ Item No	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks
77	Add cost of Waste Plastic @ 8% of Bitumen Weight									
	Bitumen = 141 kg/cum					Total Qty in Kgs			1311.02	

TEJUS CONSULTANTS

For KARTHIK ENTERPRISES

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.